

Developing Countries and Monitoring WTO Commitments in Response to the Global Economic Crisis

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Abstract

This paper examines the role of the public sector in providing additional information to exporters in developing countries as they seek to monitor and keep open their access to foreign markets by using the rules of the WTO system. It highlights new information generation and dissemination initiatives undertaken by the WTO Secretariat, Global Trade Alert, and the World Bank in response to the global economic crisis of

2008–2009. Given trends in the imposition of new crisis-era trade barriers that these initiatives have identified, the paper describes ways in which the new sources of rich and detailed data may be used to further assist developing country exporters that may lack the capacity to sufficiently monitor their trading interests by relying solely on private resources.

This paper—a product of the Trade and Integration Team, Development Research Group—is part of a larger effort in the department to evaluate the impact that international institutions have on the market access. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at cdown@worldbank.org.

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1. INTRODUCTION

The WTO provides three critical services to the international trading system: a forum for multilateral *negotiations*, an apparatus to mediate the neutral arbitration of trade-related *disputes* between members, and the *illumination* of members' changes to policies that affect foreign commercial interests. And yet, discussions of reform to the WTO system rarely address the third pillar of monitoring and transparency. This paper examines the issue of information generation and the role of surveillance in the WTO system.

As motivation, one of the fundamental contributions of the WTO system's architecture is that it *allows for* substantial monitoring of changes to the national policies that have an impact on the conditions of foreign market access and hence, the flows of international trade. The WTO architecture has resulted in a system of rules as well as reporting requirements that makes it possible to transmit information concerning how one member's policy changes are expected to affect the foreign market access interests of exporters in *other* WTO Member economies. Monitoring may have never been more important for the sustainability of the rules-based trading system than during the height of the global economic crisis in 2008–2009.

This paper addresses a number of questions related to the monitoring of the foreign market access interests of exporters in *developing* countries – especially those with profit margins so small relative to the gains from enforcement – most unlikely to devote the private resources to cover monitoring costs themselves. How does monitoring of their interests take place, and how does this compare to what theory suggests their strongest needs would be? As it is highly unlikely that developing country export interests are able to fully cover the needs themselves privately, is sufficiently *detailed*

data and information being generated to enable other development-focused groups to step in to *package* the information into the format that is most useful to exporters' needs? Finally, to what extent are groups monitoring and informing on the policy changes that might be *violations* of WTO commitments and thus potentially subject to action under WTO dispute settlement?

As an underlying theoretical motivation, a number of factors contribute to why private actors, and especially those associated with exporting interests in developing countries, do not spend sufficient resources on monitoring their own foreign market access interests. First, because monitoring is costly and generates positive externalities so that others can free-ride off the benefits, the lesson from basic economics is that private actors do not perceive the right incentives to devote sufficient resources to monitoring their own interests. Second, the introduction of other development-friendly initiatives such as the Advisory Centre on WTO Law (ACWL), the developing country legal assistance centre established in 2001 that subsidises the cost of litigation of actual WTO disputes (but not the full cost of information generation), may have unintentionally deepened the *disincentive* for private sector law firms to do more monitoring on behalf of *developing* country exporters in particular.¹ The implication is that the international trading system is unlikely to have deployed either the optimal *level* or *distribution* of

¹ See Bown (2009a, chapters 6 and 8). The theoretical argument is that providing subsidised support for developing countries to cover WTO litigation expenses but not information generation (i.e. 'ambulance chasing') reduces the incentive for private law firms to dig up such information on WTO violations that may adversely affect developing country exporters because the law firms are less likely to obtain the exporter's actual (billable) litigation work as clients.

surveillance of the WTO membership's market access commitments; especially for the monitoring needs of developing countries.

The fear of a global resort to protectionism during the global economic crisis of 2008–2009 created a political opportunity to push forward the monitoring agenda, and this resulted in additional initiatives to monitor multilateral commitments under the trading system. To summarise the chain of events, the financial crisis in mid-2008 and its global spread resulted in a major shock to the international economic system. In particular, the fourth quarter of 2008 saw a sudden and unexpected drop in global trade flows. The year-on-year estimated decline in world trade during this time was over 10%; furthermore, large declines in trade took place simultaneously in each of the major trading regions including a 16% drop for Europe, a 7% decline for North America, and a 5% decrease for Asia (WTO 2009: 3, chart I.5). The first quarter of 2009 saw another estimated (year-on-year) decline in world trade of 30%. The fall in trade during this period of 2008–2009 was so sudden and immediate that it was clearly *unrelated* to any major new global protectionist initiatives that had taken place up until then. Bown (2009b, table 7.4) provides one set of estimates concerning trade remedy data consistent with this. These results indicate that even under a hypothesised (though unlikely and subsequently unrealised) scenario that each trade remedy investigation initiated from first quarter (1Q) 2008 through 1Q 2009 were to result in prohibitive trade restrictions for the affected products, the upper bound estimate is that this might have affected less than 0.5% of these economies' imports.

However, by early 2009, the main concern for trade policy was that the global economic recession that accompanied the financial crisis had resulted in widespread

unemployment. Worsening macroeconomic conditions stoked fears of a resulting increase in calls for new trade barriers in recession-battered economies. As discussed below, at the macro-level there is evidence of a global increase in industry requests for new trade barriers in 2009; and it is also apparent from this data that the main increase in imposition of definitive new trade barriers did not take place until late 2009 (and into 2010), i.e., *after* the sharp trade contraction. While new protectionism during the crisis was therefore not a cause of the large decline in global trade flows in the fourth quarter of 2008 and the first quarter of 2009, a concern for the trading system is that such new barriers (imposed in late 2009 and into 2010) may create distortions that do not allow trade to achieve its otherwise natural growth trajectory as the global economy grows out of the recession. Furthermore and from a development perspective, the general global trends in new trade barriers are accompanied by the additional concern that a high share of the new trade barriers being imposed are affecting exporting firms in developing countries, and especially South–South trade flows.² Finally, the collective response of the WTO membership in 2009 was not to rely on dispute settlement initiatives to open up foreign markets that might be closing down – they combined to initiate only fourteen new disputes in 2009, only six of which were brought by developing countries.³

This paper thus considers the present and future of monitoring in the WTO system, with a particular emphasis on the surveillance needs of developing countries in

² Examples of early research initiatives taking stock of protectionist data trends during the crisis include Newfarmer and Gamberoni (2009), Bown (2009b,c), and other contributions in the collections of Baldwin and Evenett (2009), Cattaneo, Evenett and Hoekman (2009), and Evenett, Hoekman and Cattaneo (2009).

³ Over the period 2001–2008, WTO Members collectively initiated an average of 21 new disputes per year; developing countries initiated 11 of these disputes on average per year (Bown, 2009a, pp. 65–70).

light of the global economic crisis. First, why focus on the foreign market access monitoring needs of developing countries? For a number of reasons, their needs are the most neglected under the current trading system, as there is very little private sector monitoring that looks out for their interests. The economic implications of this are likely to be quite important if it results in them having less secure access to foreign markets, because they are then unable to fully exploit international trade as part of their growth strategies. If developing country exporters cannot adequately monitor the conditions of foreign market access, they are ill-informed when WTO violations occur, and they will be unable to use the threat of or actual resort to WTO dispute settlement to convince trading partners to fulfill their commitments to keep markets open.

The next section provides a more detailed discussion of the theory behind calls for additional and refocused monitoring activity on behalf of developing country exporters in the WTO system. While we describe how the WTO Secretariat makes important contributions in this area, we also identify where more efforts are needed given that much of the WTO's monitoring effort is not targeted towards providing information to the private sector (firms and their advocates). This information is necessary, for example, if such firms are going to make a rational decision on whether to self-enforce their trading interests by convincing their policymakers to engage in the dispute settlement process on their behalf. We conclude that there is a role for substantial expansion of monitoring and surveillance, and we then describe a number of monitoring initiatives that the 'extra-WTO' community (World Bank-sponsored *Global Antidumping Database* and *Global Trade Alert*) undertook in the midst of the global economic crisis in 2009. We detail how such initiatives have created useful inputs that could be repackaged to further the

monitoring agenda. Finally, we outline the key questions that such inputs must be used to answer in order to more directly assist the interests of developing country exporters so as to allow them to better utilise the WTO system, including its dispute settlement provisions.

In the third section, the discussion turns to a specific appraisal of the strongest immediate term needs for additional information generation, given the legacy of potential violations of WTO commitments over market access spurred by the global economic crisis of 2008–2009. The paper concludes by providing a reminder that while it is important to monitor and address any new crisis-generated trade barriers, developing country exporters have *systemic* monitoring needs whether or not the global economy is in crisis. Furthermore, some of these needs may change in the future depending on the conclusion of the Doha Round and any new multilateral agreements on climate change and border taxes.

2. THEORY AND INPUTS TO MONITORING WTO COMMITMENTS

This section briefly reviews the theory behind the importance of monitoring foreign market access commitments in the WTO system. We then discuss actual monitoring efforts undertaken in the WTO system, especially as such efforts have been changing in response to the global economic crisis of 2008–2009. Finally, we turn to how other groups might best utilise the data provided by these new initiatives to inform exporters in developing countries. Such exporters seek information on how changing policies may have affected their foreign market access interests and whether WTO dispute settlement

is a viable possibility for them to engage with their policymakers to self-enforce their trading interests.

The theory behind public sector monitoring of WTO commitments

Any discussion of how best to structure public resources dedicated to the monitoring of international market access commitments must be grounded in theory. Here we draw on the theory provided in Bown (2009a) which considers the issue from the perspective of the exporting firm whose market access interests are at the heart of international trade.⁴ The exporting firm has expectations of access to foreign markets that its government negotiated on its behalf and which are bound into the foreign country's WTO commitments. Now it is up to the exporting firm and its advocates to keep the foreign market open, which sometimes means through self-enforcement and utilising the formal WTO process of dispute settlement.

In the theoretical model, the exporting firm needs the capacity to work with its government officials to potentially use WTO dispute settlement to self-enforce its access to foreign markets. Suppose a foreign government imposes a WTO-violating trade or trade-related measure that eliminates that firm's market access. We define 'monitoring' as the generation of sufficiently precise information on the cause of an exporter's loss of foreign market access and the benefit to this policy being reversed, so that the exporter can make an informed decision based on a cost–benefit analysis of whether to engage

⁴ This section in particular draws heavily from the arguments in Bown (2009a, chapter 5), to which the reader is pointed for a more detailed discussion of the theory. See also Bown and Hoekman (2005).

government policymakers to use formal WTO dispute settlement on its behalf.⁵ Self-enforcement of any foreign market entails a cost. From an economic modelling perspective, this foreign-market specific cost is similar (though in addition) to what an exporting firm must spend to adapt and market its product to new foreign consumers, or to establish a new network to deliver it to them. The main difference between the cost of self-enforcement and these other costs of supplying to a foreign market is that the latter are entirely borne by the exporter, whereas self-enforcement costs are sometimes ‘shared’ because of the positive externalities generated. Because trade policies are typically quite blunt, the effort of keeping a foreign market open to one exporter has implications for other exporters as well. This possibility for sharing both creates an additional set of complications and generates a role for the public sector.⁶

For an exporter to use WTO dispute settlement to reopen a market that has been closed with a WTO-violating policy, the first step is to generate technical information on the cause of lost foreign market access, compiled from economic, legal and political

⁵ This discussion is admittedly partial equilibrium in nature as it completely abstracts from other costs impeding the firm from engaging its government in WTO dispute settlement. Many of these other impediments are noteworthy; they are addressed more fully in Bown (2009a). The idea here is to focus entirely on one particularly critical problem facing developing country exporters in the WTO system, and that is the lack of economic, legal, and political information that they need to even *begin* consideration of whether to engage in WTO dispute settlement.

⁶ An alternative model (and motivation) for which monitoring might be useful is if it provides additional information *within* the policy-imposing country. For example, the provision of new information on the expected domestic cost of a particular welfare-reducing policy implemented by one government ministry could engage other ministries which may have access to more efficient policy instruments.

expertise.⁷ The legal information is evidence of a violation of WTO commitments or obligations. There are at least two needs for economic information, including both the economic importance of the WTO-violating cause of lost exports and the economic assurance that any WTO violation was both an important cause of the lost exports and that the loss was not caused by a (simultaneous) change in alternative factors unrelated to the violation – e.g., a recession, increased competition from fair alternative (foreign or domestic) sources, or something else. Finally, the political information includes estimated probabilities that the foreign country will engage in policy reform and compliance with potential WTO rulings, as well as the potential form of the compliance and whether that is likely to result in substantial additional market access.

The generation of such information requires technical expertise in economics, law and politics. This information is costly for the exporter to acquire, though the argument is that in a *self*-enforcing system like the WTO, this information must be available to the exporter to successfully and *sustainably* engage in international trade. In many developed countries, the evidence is that firms have been able to overcome the cost hurdle of generating this information through a combination of at least three routes: 1) they are sufficiently profitable to pay private actors to monitor their own foreign market access interests; 2) they have organised with other local exporting firms cost-sharing arrangements by forming industry and trade associations to monitor common foreign

⁷ We present our discussion through the lens of WTO dispute settlement. However, there are other mechanisms that serve as complements to formal dispute settlement which could also benefit from the additional generation of technical information. Examples include various committees within the WTO, as well as external networks of technical officials and standard-setting groups, such as Codex Alimentarius. For a discussion, see Hoekman and Kostecki (2009).

market access interests jointly; or 3) their governments have undertaken efforts to provide foreign market access monitoring on their behalf.⁸ Because these three options for monitoring are less likely outside industrialised countries, insufficient private sector resources are dedicated to monitoring the foreign market access interests of exporters in developing countries.

Given this theory and evidence, Bown (2009a, chapter 8) takes the approach of proposing a new independent and multilateral monitoring body called the Institute for Assessing WTO Commitments (IAWC).⁹ While the proposed IAWC would rely on the rules and procedures of the WTO system for providing its assessments, it would be established, funded and governed separately and independently from the WTO Secretariat.¹⁰ The primary purpose of the IAWC would be to address the problem that we

⁸ See Bown (2009a, chapter 5) for a more complete discussion and examples of 1) and 2). Examples of 3) would include the US Trade Representative's *National trade estimate report on foreign trade barriers*, the EC Directorate General-Trade's *Market access database*, and Japanese Ministry of Economy, Trade and Industry (METI)'s *Report on the WTO inconsistency of trade policies by major trading partners*. Most developing countries do not have such a sophisticated system in place. This is not to suggest that devoting resources at the national level is the optimal approach, this is merely to provide evidence that national governments in industrialised countries have recognised the need for the public sector to provide additional monitoring of WTO commitments and this is how they have chosen to respond. Our proposal below presents an alternative approach where monitoring is not constrained to take place at the national level.

⁹ For examples of similar calls for increased monitoring and surveillance by the extra-WTO community, see Gallagher and Stoler (2009) and also Hufbauer (2009).

¹⁰ It is not necessary for the reader to take the IAWC literally. Instead it is sufficient to think of the proposed IAWC as identifying the different topic areas that a number of groups might target separately. Such groups might include networks of think tanks, research institutes, and even more technically

identified above – i.e., to create and package additional information of use to exporters in developing countries whose monitoring needs are *insufficiently* addressed – whether that is because their exported products were: 1) not profitable enough for them to bear the costs privately; or the firms were unable to reduce the cost burden by cost-sharing 2) with other firms because of the inability to organise into trade associations and/or 3) with their government, because the government did not have the institutional infrastructure in place to provide those services. The proposed information generation services of the IAWC would *complement* other development-focused initiatives in the WTO system, such as the 2001 establishment of the independent Advisory Centre on WTO Law (ACWL), the main legal assistance centre for developing countries in the WTO system.¹¹

The rest of this contribution addresses the greatest monitoring needs of exporting firms in developing countries, applied to the context of new developments resulting from the global economic crisis of 2008–2009. These monitoring needs, and hence the ‘monitoring’ information that the public sector should provide, are also influenced by the *supply* of WTO-inconsistent policies arising in the trading system. After describing

sophisticated, development-focused non-governmental organisations (NGOs). The important point is that such information and analysis at the heart of the proposed monitoring work programme would be generated outside the WTO Secretariat. For political reasons, any increased substantive monitoring efforts undertaken by the WTO Secretariat might adversely affect its *other* important roles in the system – as forums for negotiation (multilateral rounds) and litigation (neutral arbiter of disputes).

¹¹ For discussions of the ACWL, see Van der Borgh (1999), Bown (2009a, chapter 6), or Bown and McCulloch (2010). However, while the IAWC would provide information that ultimately might be an input into the WTO dispute resolution process – i.e., to the exporting firms in developing countries, as well as their advocates (including the ACWL) – the IAWC would *not* be involved in the actual WTO litigation process.

existing monitoring initiatives in the next section, we will then turn to some of the potentially important focus areas spurred on by new and potentially WTO-inconsistent policies brought on by the 2008–2009 global economic crisis.

A brief history of monitoring before and during the global economic crisis

While the last section highlighted the theory behind public sector monitoring of export market access interests of developing countries, we do not mean to suggest that public monitoring does not yet exist. This section reviews both the state of monitoring prior to 2009 and the new monitoring initiatives and developments that took place in 2009, spurred on by the global economic crisis. Many of the developments of 2009 in particular have resulted in a tremendous amount of new and useful information. However, this information still needs to be analysed by technical experts and repackaged to be made useful to exporters in developing countries.

Prior to 2009, most of the public monitoring that actually took place was done by the WTO. Through its performance of national Trade Policy Reviews of member economies, and by serving as a repository for government notification of changes in trade and trade-related policies, the WTO both laid the groundwork for other groups to monitor and provided most of the global monitoring efforts itself.¹² However, in the context of the firm-level model presented in the last section, there are two main concerns with the WTO

¹² See Bown and Hoekman (2008) for a critique of the WTO's current Trade Policy Review process. Bown (2009a, chapter 8) details other pre-crisis efforts to provide information beyond that being generated by the WTO Secretariat, including the Global Subsidies Initiative and the Global Antidumping Database that is described in more detail below.

taking on this role. First, the WTO was not given the mandate to provide sufficiently detailed information on changes in policies to be of use to private sector agents – whether it be a firm or an advocate working on its behalf.¹³ Second, given its other important roles in the system, it may be politically quite difficult for the WTO Secretariat to play an active monitoring and information generation role.

The global economic crisis took hold in late 2008, and by early 2009 a number of new initiatives provided additional information and data of use to the monitoring agenda. Much of the information could be especially useful for those interested in improving understanding of changes to the foreign market access opportunities facing exporters in developing countries. Table 1 presents a timeline of a number of major information-generating announcements in 2009 that focuses on three entities: the WTO Secretariat, the World Bank-sponsored *Global Antidumping Database*, and the *Global Trade Alert*.

The WTO Secretariat did respond in 2009 with more frequent updates and information useful for monitoring. In April 2009 it began to provide quarterly lists of trade and trade-related measures imposed during the crisis – with data taken from official and also *unofficial* (news) sources. An explicit statement did accompany the lists, stating that, despite a measure being included in the document, the WTO itself was not making any judgment as to its potential consistency with any commitments or obligations.¹⁴

¹³ Consider a policy like antidumping – the information that the WTO reports on behalf of its member countries is neither timely (it arrives with a substantial lag) or detailed enough (no tariff-line codes of products affected) to be of use to analysts seeking to make sense of the economic market implications of the potential barrier.

¹⁴ Footnote 1 of the April 20 list (WTO document WT/TPR/OV/W/1) states: “This is intended to be a purely factual report and is issued under the sole responsibility of the Director-General. It has no legal

While the lists were quite a useful first step, they nevertheless still generated few additional details that could be used by an analyst to help determine whether such a measure was an economically important cause of a reduction to its country's exports.

A second example was the World Bank's continued sponsorship of the Global Antidumping Database, including a quarterly updating initiative begun in March 2009 that provided detailed information on new trade remedy investigations and trade barriers being imposed under antidumping, countervailing duty, and safeguard provisions.¹⁵ The main distinction between the Global Antidumping Database and other initiatives was the level of detail. For example, by including information on Harmonized System (HS) tariff line product codes and the names of firms subject to the new trade restrictions (as well as those behind the investigating petitions), analysts could match the information on

effect on the rights and obligations of Members, nor does it have any legal implication with respect to the conformity of any measure noted in the report with any WTO Agreement or any provision thereof. This report is without prejudice to Members' negotiating positions in the Doha Round. It is a preparatory contribution to the report by the Director-General that is called for in Paragraph G of the TPRM mandate and that aims to assist the TPRB to undertake an annual overview of developments in the international trading environment which are having an impact on the multilateral trading system.'

¹⁵ In the interest of full disclosure, the author was the initiator of the Global Antidumping Database project in 2004 and has managed the project since its inception, with financial resources provided from the World Bank. Some seed funding for the project in 2004 came from Brandeis University. Since 2005, the Internet-based and freely available Global Antidumping Database has provided detailed, tariff-line, and firm-level data on national use of trade remedies such as antidumping, safeguards, and countervailing measures. In 2009, the initiative was significantly expanded to include additional policies and countries (which were using such policies more frequently in light of the global economic crisis), as well updating the information updating more often – i.e., quarterly. See Bown (2010) for more details.

potential new trade barriers to other complementary databases (e.g., on trade flows) to determine how economically important any given policy action would be.

Such an approach was also adopted by a new initiative launched in June 2009 called the *Global Trade Alert*.¹⁶ The Global Trade Alert (GTA) was designed to go beyond the trade remedy data provided in the Global Antidumping Database to catalogue and detail dozens of other types of trade and trade-related measures – e.g., changes in tariffs, import licensing, government procurement, imposition of subsidies, and changes in technical and sanitary or phytosanitary standards among others. Many interpreted the GTA's contributions throughout the global economic crisis as being intended to 'name and shame' government policymakers by raising the public profile of trade policy actions. Perhaps government officials would think twice about how they structured new policy initiatives if they were concerned that the GTA would flag their policies with a red triangle that indicated 'the measure has been implemented and almost certainly discriminates against foreign commercial interests.' Nevertheless, the publicity around the GTA has resulted in critics of its own. Some focused on the utility of the information being provided for understanding the scale of the spread of protectionism taking hold during the global crisis, given the lack of comparable pre-crisis data available to use as a benchmark. Others argued that the GTA was overstating the incidence of protectionism which could provide fodder and cover for other policymakers interested in increasing

¹⁶ For a discussion see Evenett (2009). According to the Global Trade Alert website, it is coordinated by the Centre for Economic Policy Research (London), and its funders include The World Bank, UK's Trade Policy Unit (combining the Department for International Development and the Department for Business, Innovation and Skills), the German Marshall Fund of the United States, Canada's Centre for International Governance Innovation, and Canada's International Development Research Centre.

future protectionism.¹⁷ We do not address such critiques here. Instead, the next section focuses on how groups might use the tremendous amount of information compiled into the GTA and the Global Antidumping Database to improve the quality of information provided to developing country exporters in the WTO system regarding the potential infringement of their market access rights.

The four questions that information generated from these new initiatives could help answer

The GTA and Global Antidumping Database provide raw data and information. Their main contributions to date were not to perform the technically demanding task of packaging the raw information into the format needed for exporters and their advocates in developing countries in the context of potential WTO dispute settlement. Here we address the question of how others can adapt the information now available to put it to good use.

Begin with the considerable GTA efforts of identifying trade-related measures, and its approach of ‘red flagging’ certain measures based on whether they are likely to have a negative impact on foreign commercial interests. For an exporting firm in a developing country and its advocates to make a sufficiently informed cost–benefit analysis of whether to use WTO dispute settlement to attempt to reopen a market that was closed off during the crisis, they require answers to at least four questions:

¹⁷ Criticisms of the GTA and the impact of such monitoring activity during the crisis include Rodrik (2009); see also the Reuters interview with Richard Eglin, Director of the WTO’s Trade Policies Review Division (Lynn, 2009).

- (1) What is the likelihood of a WTO finding of a legal inconsistency of any particular measure?
- (2) How large is the lost foreign market access at stake?
- (3) Was this WTO violation a sufficiently important economic cause of lost foreign market access?
- (4) What is the legal-political *likelihood* as well as the *form* of compliance of the respondent with any WTO rulings?

If resources were not a constraint, the idea would be to take every red-flagged measure in the GTA database, as well as every imposed antidumping, countervailing duty, or safeguard measure found in the Global Antidumping Database, and to evaluate each according to the answers to these four questions. Specifically, an analyst would use legal expertise to clarify the likelihood that the existing WTO jurisprudence would determine that there has been a violation of commitments. Then she would take the information on the HS codes and match them to trade flow data to determine how much market access is at stake. Third, additional economic expertise would be used in an attempt to clarify the extent to which the new trade barrier was the cause of the lost market access as opposed to being due to some other cause.¹⁸ Finally, legal and political expertise would be

¹⁸ Admittedly, disentangling the economic impact of any potential WTO violations from other causes may be quite challenging given the environment generated by the timing of the global economic crisis. For example, there was tremendous volatility and turmoil in markets during 2008–2009, and in many instances it may be difficult to distinguish the impact of a WTO-violating policy from other ‘natural’ economic activity that was simultaneously taking place – e.g., the negative demand shock associated with the

combined to assign a probability to the likelihood that the policy-imposing country will comply with WTO rulings and implement a change in policy that results in market access.

In economic terms, the purpose of combining such economic, legal and political expertise is to provide the exporting firm with an *expected value* of the payoff to pursuing a WTO dispute, so that the firm can weigh that expected benefit against the expected cost of engaging in WTO dispute settlement.¹⁹ Only an exporter that is informed about the expected benefits and costs of engaging the WTO's self-enforcement system can make rational decisions regarding whether to use it.

This section has presented a basic template by which experts in economics, law, and politics would band together to use data provided by monitoring initiatives such as the Global Antidumping Database and GTA to generate and better package information of use to exporters in developing countries. We have not yet addressed the reality of resource limitations and the need for public good-minded analysts to prioritise their efforts based on (i) the (demand side) needs of particular interest to developing countries, (ii) the types of trade barriers being imposed (supply side), and (iii) the largest gap of

recession. Furthermore, consider an example like the US bailout of the automobile sector that we discuss in more detail below. In this case, there was an almost simultaneous demand shock (in 2008) induced by high petrol prices and increased recognition of the impact of climate change that may have changed the tastes and preferences of consumers towards different types (of more fuel-efficient) cars.

¹⁹ Of course an expected value is only one summary statistic – the exporter is also likely to be interested in the statistical *distribution* of possible outcomes to a potential dispute. This includes its expected payoff under various forms of ‘partial’ compliance, whether that partiality in compliance is due to differences in the timing of implementation or the completeness with which the trade barrier is removed.

missing information that is not being generated by other sources, such as private firms themselves. This is the focus of the next section.

3. MONITORING NEEDS DUE TO POTENTIAL CRISIS-INDUCED ABUSES OF WTO COMMITMENTS

The global financial crisis of 2008–2009 resulted in a severe economic recession in many countries that heightened political pressure to respond with new policy initiatives. In the face of increased political pressure to respond quickly, it is likely that governments increased the amount of policymaking activity that would both adversely affect foreigner's market access and violate WTO commitments, and that this activity would be above even the 'normal' levels that take place under calmer economic conditions. Below we consider three different categories of crisis-induced policies – 1) trade remedies 2) other import border measures, and 3) subsidies and other behind-the-border measures. To guide the discussion, we turn to examples of trade barriers identified by initiatives such as the Global Antidumping Database, Global Trade Alert, and WTO Secretariat; from which it may turn out that there are dozens of examples of countries imposing policies in potentially WTO-inconsistent and economically meaningful ways.

Because there are dozens and perhaps hundreds of new crisis-era policies alone that *could be* subject to the additional analytical scrutiny of 'monitoring' by the technical experts (economists, lawyers and political scientists) best suited to advising developing country exporters, we also provide an analytical discussion of which policies *should be* subject to such additional scrutiny. From the demand-side perspective, we focus on

developing countries and their small profit-margin industries – i.e., firms for which it is unlikely that sufficient extra resources are available to coordinate politically and engage in the self-monitoring that may occur through trade associations or national governments on their behalf. Within the supply side of new trade-restricting policies to consider, our decision on where to apply additional analytical public resources is guided by a focus on potential WTO violations of *national treatment*, or a policy that discriminates between domestic firms and foreign firms. These are the policies likely to affect many diffuse exporters; i.e., policies to which challenges are otherwise least likely because the coordination across many foreign interests is most difficult.

Before turning to the three categories of policies identified above, it is worth repeating that the data and information generated by initiatives such as the GTA, Global Antidumping Database, and the WTO Secretariat are still primitive and merely an input for *others* to use. These sources admittedly provide little information on the key questions (1) through (4) identified above. Teams of economists, lawyers and political analysts with technical expertise must work together to match up the primitive data from these sources with more detailed information on trade flows, market conditions, and industry and firm performance. With respect to any potential trade barrier identified by these initiatives, exporting firms and their government policymakers require answers to these four questions in order to make the larger expected cost–benefit calculation. Without this information they will be unable make a rational determination of whether to raise the issue of a potential WTO violation with trading partners; and subsequently whether to bring this matter to the WTO, potentially for dispute settlement.

Crisis-induced abuses of trade remedies?

In times of economic downturn, it is common for domestic industries to petition their governments under trade remedy laws such as antidumping, countervailing duties, and safeguards for new import-protecting measures (Knetter and Prusa, 2003; Irwin, 2005). As figure 1 indicates, the global economic recession in 2008–2009 was no different. The beginning of the crisis in 2008 led to a 35% increase in investigations relative to those that had taken place in 2007 before the crisis, and the 2009 increase was another 19.6% higher than the level in 2008 (figure 1a). Second, given the typical 12–18 month lag between the initiation of a new trade remedy investigation and the final decision to impose definitive trade barriers, any increase in new import restrictions associated with the crisis did not take hold until late 2009. Overall, there was a 29.5% increase in the number of new (definitive) product-level import restrictions in 2009 compared to 2008 (figure 1b), though most of this is driven by an increase during the fourth quarter of 2009.

The fact that a domestic industry files a petition for a trade remedy investigation or that the government grants the request and imposes a new trade barrier is *not* evidence itself of a WTO violation. Indeed, the WTO's Agreement on Antidumping, Agreement on Subsidies and Countervailing Measures, and Agreement on Safeguards, as well as close to 15 years worth of WTO jurisprudence, create conditions under which national governments are permitted to investigate such requests and authorised to respond with new import restrictions. However, these WTO Agreements each require that two basic pieces of evidence be provided in order to justify the imposition of a new trade barrier. While injury to the domestic industry is one necessary component required in each of the

Agreements, injury by itself is insufficient. The injury must be accompanied by evidence that the injury was caused by either dumped (antidumping), subsidised (CVD), or surging (safeguard) imports, and government investigators are supposed to rule out that the injury was caused by something else. The massive negative demand shock associated with the global economic recession is one example of ‘something else’ that is not related to imports, but that may have caused injury. Other examples may be industry or (domestic) firm specific: is there evidence that consumer tastes and preferences have changed in ways that led to injury? Was the domestic industry plagued by firms that were poorly managed or which made bad decisions? In light of such possibilities, in some jurisdictions WTO violations may occur because national administrators of these trade remedy investigations are not paying sufficient attention to the *causal* link between unfair (dumped or subsidised) or fair (but surging) imports and undeniable evidence of injury to the domestic industry.

Are such potential abuses of importance to developing country exports? Given that roughly 75% of the trade remedy investigations and measures (that are exporting country specific, such as antidumping, CVD and China-specific safeguards) imposed during the crisis have targeted developing countries and that these are increasing compared to pre-crisis levels (Bown, 2010), this would suggest that they are important. Furthermore, consider the historical data on WTO dispute settlement. First, as figure 2a indicates, over 40% of all WTO disputes initiated between 2001 and 2008 involved allegations of WTO-inconsistent antidumping, countervailing, or safeguard measures. Second, such policies are the targets most frequently challenged by developing countries under the WTO – nearly 50% of all of the disputes they initiated between 2001 and 2008

concerned these sorts of trade remedies (Figure 2b). Thus there is a strong presumption that there will be many new WTO disputes initiated by developing countries over the crisis-era use of trade remedies against their exports.

However, the main question is whether *additional* public resources should be devoted to providing answers to the technical questions (1) through (4) raised above concerning trade remedies imposed during the crisis. Perhaps surprisingly, if the discussion of the next two sections reveals that there are many additional types of trade barriers that require publicly-assisted scrutiny, the answer to this question may be *no*.

Despite these trade barriers being important for developing country exporters to target, there are at least three reasons why they should not necessarily be subject to *additional* publicly-funded scrutiny that would come at the expense of a closer examination of *other* crisis-era trade barriers. First, of all the trade barriers, trade remedies are possibly the easiest for any exporting firm (that has been hit by them) to understand and for it then to demonstrate to its government that it has been adversely affected by a potential economically important WTO violation. Indeed the evidence from the pre-crisis use of WTO dispute settlement indicates that even *without* any new public assistance monitoring, many developing countries have logged a strong record of successfully engaging the WTO dispute settlement system to challenge imposed trade remedies. Second, an additional concern that we have not yet addressed is that limited public resources may best target the sorts of trade barriers imposed during the crisis that are *least* likely to be removed on their own. While one should not go so far as to say that imposed trade remedies are automatically removed, the WTO Agreements describing how they are to be used contain sunset provisions (antidumping, CVD) or phase-outs

(safeguards), and this increases the chance that trade remedies imposed during the crisis will eventually be removed without resort to WTO dispute settlement.²⁰ Third, public resources are best utilised to combat the free-rider and problems of coordinating and organising exporters in different countries that are jointly affected by a trading partner's new trade barrier that violates the WTO principle of national treatment. Because antidumping and countervailing measures are exporter-specific, to the extent that trade remedies need additional publicly-funded information, the analysis should target new trade barriers implemented as global safeguards, and not antidumping or CVDs.

Other tariff and non-tariff barriers imposed at the border?

WTO Members do not limit their policy interventions to trade remedies such as antidumping, countervailing duties, or safeguards. Thus focusing exclusively on these policies is likely to miss part of the story of WTO violations affecting developing country exports during the crisis. Consider table 2, which provides a summary of the Global Trade Alert's reporting of various types of trade-related policies during the global economic crisis. While the table indicates that trade remedies result in an important category of new trade-related measures, policymakers have also resorted to *other* types of border measures (such as increased tariffs, new quotas, or import bans) to restrict market access to foreigners during the crisis.

²⁰ This is not to indicate that WTO Members all follow the sunset provisions on antidumping – there is some evidence to the contrary. See, for example Moore (2006) as well as Cadot, de Melo and Tumurchudur (2007). Hence whether sunset provisions are followed in the future will require additional monitoring.

How might an analyst use the GTA database to construct answers for the four key questions regarding the expected impact of a new trade barrier? To address this question, we go through the exercise of examining a specific example of a GTA announcement. Consider the Brazilian government's decision in August 2009 to increase its ad-valorem import duty from 2% to 14% for industrial fatty alcohols.²¹ First, the GTA takes care to note that the average bound tariff of the products concerned is 35% and that the products were on the list of exceptions of Mercosur's common external tariff, and they are now back to their original rate. Thus a simple examination of this information suggests that while Brazil may have imposed a new import restriction with this applied tariff increase, there is no obvious WTO violation – e.g., such as when a country increases its applied tariff above the binding rate. Regarding the first question of whether such a measure is likely to be legally challengeable at the WTO, since there is no evidence to suggest a violation, the analyst might stop there and move on to assessing the next measure on the GTA list.

However, suppose just for the sake of our hypothetical exercise that the Brazilian tariff increase on industrial fatty alcohols *did* contain a potential WTO violation that satisfied question (1). How could an analyst begin to use the data provided by the GTA to address the *other* three questions to which answers are needed for an exporter or its advocate to make an informed cost–benefit assessment of whether to engage in WTO dispute settlement? Because the GTA also explicitly identifies the HS codes at issue under the measure, an outside analyst could take this information and answer question (2)

²¹ See Global Trade Alert 'Brazil: tariff increase from 2% to 14% on industrial fatty alcohols,' Measure #1035, Published 17 Dec 2009. The tariff lines that the GTA reports as being raised are for products

– i.e., the size of the market at stake and the likely importance of this market to foreign exporters in developing countries.

In table 3 we address this question by taking the information on the 6-digit HS product codes that the GTA provides and matching them to import data made available for free on the Internet by the United Nations through Comtrade.²² First, are developing country exporters affected by this measure? The answer is clearly yes, as five out the top seven foreign sources of Brazilian imports of this product in recent years were developing countries (India, Indonesia, Malaysia, China and South Africa). Second, how large were these exports and was there a substantial reduction in exports associated with the new trade barrier? For these five developing countries, annual exports prior to the crisis were not trivial, as they ranged from US\$ 2 million to US\$ 16 million per country per year, which is well within the range of the size of exports associated with a number of disputes recently initiated by developing countries.²³ While Brazilian imports from each of these sources did fall substantially in 2009, as indicated earlier, it may be hard to attribute this (without more information) to the Brazilian tariff increase, given the

3823.70.10 and 3823.70.20.

²² In this particular case the measure was applied at the 8-digit level, and since the UN data is only provided at the 6-digit HS level there may be some mismeasurement. Furthermore, the 2009 import statistics may not be completely accurate if all of the 2009 import data has not yet been reported to Comtrade. Nevertheless, even reliance on the data for the earlier years in table 3 provides revealing information.

²³ See, for example, Bown (2009a, chapter 6, table 6-6) which reports the size of exports of stake in a number of recent WTO disputes filed by developing countries regarding foreign imposition of antidumping measures against their exporters. This list included seven examples of disputes over products with (pre-trade barrier levels of) bilateral exports of less than US\$ 12 million per year.

possibility that the global recession may have had negative demand-side implications placing downward pressure on Brazilian imports of this product as well.²⁴

Finally, is this particular trade barrier emblematic of one likely to affect multiple foreign countries (violating the national treatment principle) and thus an example where affected exporters might have difficulty coordinating due to a free-rider problem? The answer to this question as revealed by the data is also yes, given that there is no dominant foreign supplier of this product to this market. Even the largest foreign suppliers (the USA and Germany) have exports that are quite small by their country's (relative) complainant standard threshold for pursuing WTO disputes; thus it is unlikely that these industrialised countries would put a priority on using litigation over this particular Brazilian measure.

The implication of this exercise is, had the assessment of question (1) resulted in a WTO violation, using the information provided by the GTA matched to publicly available trade data to assess question (2) suggests that this measure might be one that a development-focused outside analyst would want to generate more information on so as to assist the adversely affected exporters in India, Indonesia, Malaysia, China, and South Africa. Furthermore, it is important to point out that because of the work already provided by the GTA, with the free data from UN Comtrade available on the Internet, it took us less than 30 minutes to provide a quick snapshot answer to this question.

²⁴ This is also likely given that the GTA reports the Brazilian tariff increase only took place at the end of August, meaning that eight months worth of 2009 imports of this product came in under the 2% tariff. Thus additional work and information would be needed to answer questions (3) and (4), if the information revealed by answering question (2) indicated that this particular measure was worth looking at in more detail.

Finally, consider again figure 2b which indicates that between 1995 and 2008, these other types of import border measure were the second most frequent (after trade remedies) subject of formal WTO dispute settlement challenges by developing countries. Based on evidence from the historical pattern of WTO dispute settlement, it is likely that crisis-era border measures such as new tariffs, import quotas and bans, as well as changes to procedures for licensing or customs evaluation are likely to result in new disputes initiated by developing countries on behalf of their exporters.

Crisis-induced abuses of subsidies and other behind the border measures?

The macroeconomic crisis and the threat of a deepening recession in 2008–2009 led many governments to adopt interventionist fiscal policies and impose other behind the border measures that may have had an impact on foreign market-access commitments in WTO-inconsistent ways. Again, the statistics compiled from the GTA (table 2) provide evidence of a number of measures that analysts could investigate systematically by sequentially addressing the technical questions (1) through (4) identified above.

Consider the broad category of subsidies. First, many national governments responded to shocks in aggregate demand by implementing sizeable stimulus packages. Some countries subsidised specific firms and industries – examples include the highly publicised US bailout of General Motors and Chrysler; the US government bailing out firms in mortgage, banking, insurance, and other areas of financial services, and the

European Community acting through financial interventions in dairy markets.²⁵ With the massive drop in global trade flows in late 2008 and early 2009, a number of governments (e.g., those of Brazil, India, China and Malaysia) intervened to shore up credit markets by providing export financing assistance.²⁶ There is also the concern about competitive devaluation of currencies, especially those that may be giving an advantage to exporters in one country at the expense of exporters (and competing local producers) in other economies. Finally, indirect evidence of increased subsidy use is also consistent with the trade remedy data observed and described in the last section (Bown, 2010), and in particular the increasing resort to countervailing measures being sought by industries that perceive they are being injured by unfair foreign subsidies that have affected their exports.

Subsidies are but one example of ways in which governments may have imposed WTO-inconsistent behind-the-border measures during the crisis, which have significant impacts on developing country exporters. The lowest set of rows in table 2 indicate that the GTA has found numerous other examples of new government policies such as export

²⁵ See Global Trade Alert 'United States of America: Support for General Motors and Chrysler,' Measure #0274, Published 16 July 2009; Global Trade Alert 'United States of America: Expanded bailout to mortgage guarantors,' Measure #1048, Published 29 December 2009; and Global Trade Alert 'EC: Measures to "stabilize" markets for certain dairy products,' Measure #0653, Published 8 September 2009.

²⁶ See Global Trade Alert 'Brazil: Public financing for the production of goods for exports by small and medium companies (pre-shipment phase),' Measure #0715, Published 16 September 2009; Global Trade Alert 'Malaysia: Services Export Fund,' Measure #0697, Published 10 September 2009; Global Trade Alert 'India: Pre and post shipment export credit,' Measure #0614, Published 7 September 2009; and Global Trade Alert 'China: Restructuring of the ship-building industry,' Measure #0348, Published 7 August 2009.

taxes or restrictions (which work similarly to a subsidy to aid *local* downstream industrial consumers at the expense of those located abroad), discriminatory public procurement policies (e.g., the so-called ‘Buy-America’ or ‘Buy-China’ provisions), new technical or sanitary and phytosanitary barriers (TBT or SPS) imposed without scientific justifications, as well as other measures.

Admittedly, the question of whether each of these applied policies are WTO-illegal trade barriers (question 1) is quite complex and may be more complicated to answer accurately than in the case of the other import border measures described earlier. Thus, when it comes to the question of how a development-focused outside analyst would go about addressing these four critical questions of interest to exporters, it may be more efficient to begin by tackling question (2) rather than question (1) and using it as the first screen to determine which measures not to pursue. That is, focus first on the economic question of whether any particular behind-the-border measure that the GTA has identified as potentially affecting trade has a large impact on exporters in developing countries. Only if this question is answered affirmatively should the more complex question (1) of WTO-legality and jurisprudence be addressed.

Because these sorts of behind-the-border policies are the most complex and difficult to understand – both for legal and economic reasons – this is the main area where the public sector needs to step in to provide and package more useful information for exporters and their advocates in developing countries. Indeed, evidence from the data on the historical pattern of WTO dispute initiation over 1995–2008 (figure 2b), indicates that while there have been a number of WTO disputes over subsidies and other behind-the-border measures, very few of them have been brought by developing countries.

4. CONCLUSIONS AND A REMINDER NOT TO FORGET PERMANENT AND FUTURE MONITORING NEEDS

This paper has focused on the issue of monitoring the foreign market access interests of the most vulnerable traders in the WTO system, i.e., the exporters in developing countries. These are the groups with insufficient resources to self-monitor their own foreign market interests, and for whom monitoring is a critical input if they hope to be able to self-enforce their WTO interests through formal dispute settlement. We have used economic theory to best identify their monitoring needs, and we have identified a number of new initiatives spurred on by the global economic crisis of 2008–2009 that have generated important new informational inputs useful for the monitoring agenda. We have then described how outside analysts can use these information inputs to help developing country exporters and their advocates sort through the legacy of potential WTO-violating policies resulting from crisis-era pressures of protectionism and potentially engage the WTO dispute settlement process to reopen foreign markets that were shut down.

It is important to recognise that while the global economic crisis has created a political opportunity to expand the monitoring agenda, especially to address the needs of exporters in developing countries, their needs will not disappear once the crisis has subsided. While the policy initiatives that tend to threaten the foreign markets of developing country exporters may change with the conclusion of the crisis, their need for informational assistance and continued vigilance will continue.

Finally, it is important to note that our focus on the crisis has forced us to also ignore a number of likely *future* monitoring needs of developing countries. For example, any positive conclusion to the Doha Round of multilateral negotiations will result in WTO Members taking on new commitments. In many instances the implementation may involve feet-dragging as it will take place in the most politically sensitive sectors and products – i.e., for many industrialised countries, these are the last ‘holdouts’ to liberalisation after more than 60 years of multilateral tariff cutting in the GATT/WTO system. Furthermore, any agreement establishing consensus rules on issues such as climate change and border taxes is likely to generate important monitoring needs on behalf of developing country exporters that we have not addressed either.

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Table 1: Timeline of major new monitoring initiatives in the WTO system in 2009

Organisation	Date	Information and Data Provided
WTO Secretariat – Report to the TPRB from the Director-General on the Financial and Economic Crisis and Trade-Related Developments	January 23	Identification of the problem of the potential of new crisis-induced trade barriers; but no provision of any detailed lists of new trade or trade-related measures
World Bank – <i>Global Antidumping Database</i>	March 5	Provides public list <i>and</i> detailed data on antidumping use through December 2008
WTO Secretariat – Report to the TPRB from the Director-General on the Financial and Economic Crisis and Trade-Related Developments	April 20	Provides public list of trade and trade-related measures imposed from September 2008 to March 2009
World Bank – <i>Global Antidumping Database</i>	May 11	Provides public list <i>and</i> detailed data on antidumping, global safeguard, China-specific safeguard, and countervailing duty use through March 2009
Global Trade Alert	June 8	Launch which begins its <i>ongoing</i> and continuous provision of detailed and real-time information on state measures likely to affect foreign trading partners
WTO Secretariat – Report to the TPRB from the Director-General on the Financial and Economic Crisis and Trade-Related Developments	July 15	Provides public list of trade and trade-related measures imposed from 1 March to 19 June 2009
World Bank – <i>Global Antidumping Database</i>	July 23	Provides public list <i>and</i> detailed data on antidumping, global safeguard, China-specific safeguard, and countervailing duty use through June 2009
World Bank – <i>Global Antidumping Database</i>	October 21	Provides public list <i>and</i> detailed data on antidumping, global safeguard, China-specific safeguard, and countervailing duty use through September 2009
WTO Secretariat – Overview of Developments in the International Trading Environment - Annual Report by the Director-General	November 18	Provides public list of trade and trade-related measures imposed through October 2009

Sources: The reports to the WTO's Trade Policy Review Body (TPRB) were documents JOB(09)/2, WT/TPR/OV/W/1, WT/TPR/OV/W/2, and the November Annual Report by the Director General was WT/TPR/OV/12. The monitoring reports for the Global Antidumping Database are all available on line at www.brandeis.edu/~crown/global_ad/monitoring. The Global Trade Alert's website is at www.globaltradealert.org/.

Table 2: Relative importance of various types of new crisis-era trade measures according to the Global Trade Alert

Measure Type	Measures in database	Red-flagged measures in database	Number of implemented measures	Number of 4-digit HS tariff lines affected by red-flagged measures
Trade remedies (total)	238	67	98	329
Other import-restricting border measures (total)	133	61	110	672
Tariff measure	113	47	94	543
Import ban	14	10	11	122
Quota (including tariff rate quotas)	6	4	5	7
Subsidies (total)	187	162	173	1081
Bail out/state aid measure	152	141	146	541
Consumption subsidy	11	5	7	120
Export subsidy	18	14	16	220
Trade finance	6	2	4	200
Other behind-the-border (total)	149	63	92	926
Export taxes or restriction	23	10	18	271
Intellectual property protection	5	1	1	4
Investment measure	31	5	18	0
Local content requirement	18	6	7	187
Sanitary and Phytosanitary (SPS) Measure	17	11	12	39
Technical Barrier to Trade (TBT)	9	1	3	1
Public procurement	38	21	25	368
State trading enterprise	4	4	4	27
State-controlled company	4	4	4	29

Source: Global Trade Alert, 'Statistics for Category: Type of Measure,' as of 3 February 2010.

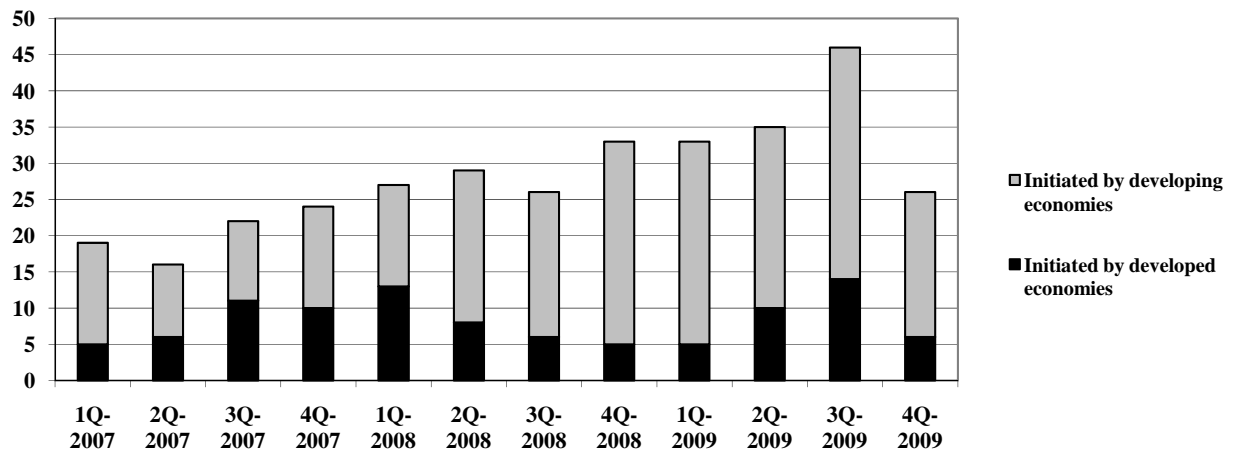
**Table 3: Example application of GTA-provided information:
Brazil's bilateral imports (US\$) of industrial fatty alcohols, 2003–2009**

Export Source	2003	2004	2005	2006	2007	2008	2009
Total	45,680,422	65,135,237	57,944,889	58,535,407	72,015,018	86,716,220	34,189,731
Germany	22,928,074	35,164,965	30,283,065	15,105,256	11,251,823	14,849,725	9,776,543
USA	7,286,531	11,692,440	8,433,994	12,341,197	13,904,643	13,480,647	9,842,666
India	3,376,360	1,495,503	2,618,862	7,432,952	11,852,078	15,718,822	7,225,833
Indonesia	5,574,223	7,001,838	8,700,839	8,163,489	7,872,520	12,960,963	4,492,563
Malaysia	4,310,667	3,766,553	676,917	6,344,117	11,599,249	11,890,988	366,125
China	0	766,879	3,540,019	3,486,252	3,686,913	3,404,722	1,249,271
South Africa	630,036	3,202,052	2,079,403	3,351,471	4,518,117	2,128,633	0
Other	1,574,531	2,045,007	1,611,790	2,310,673	7,329,675	12,281,720	1,236,730

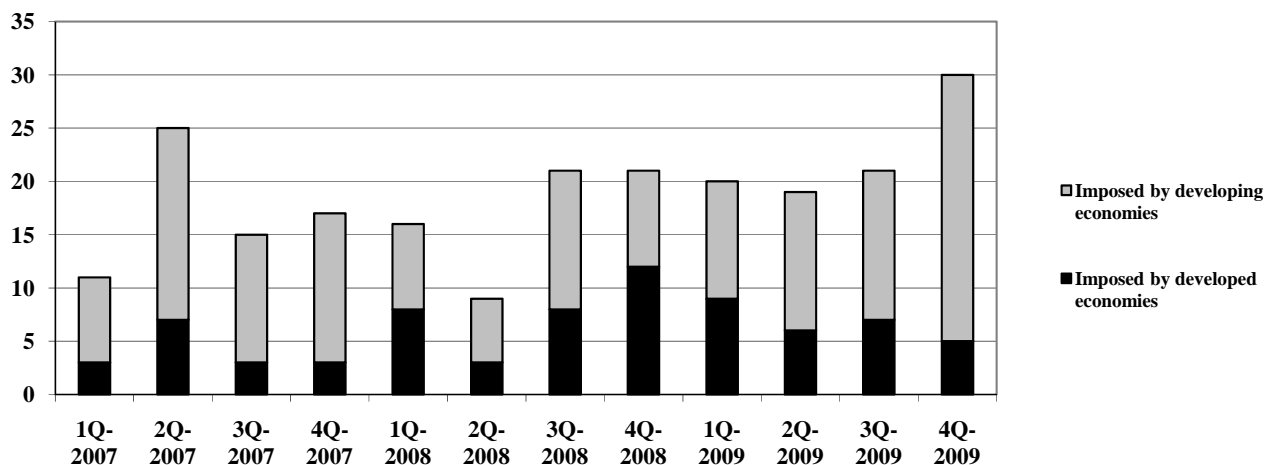
Source: Brazil's imports of HS code 382370, data from UN Comtrade's online database (<http://comtrade.un.org>), accessed on 3 February 2010. See Global Trade Alert 'Brazil: tariff increase from 2% to 14% on industrial fatty alcohols,' Measure #1035, Published 17 December 2009.

Figure 1: New trade remedies and the global economic crisis, 2007–2009

a. New trade remedy investigations



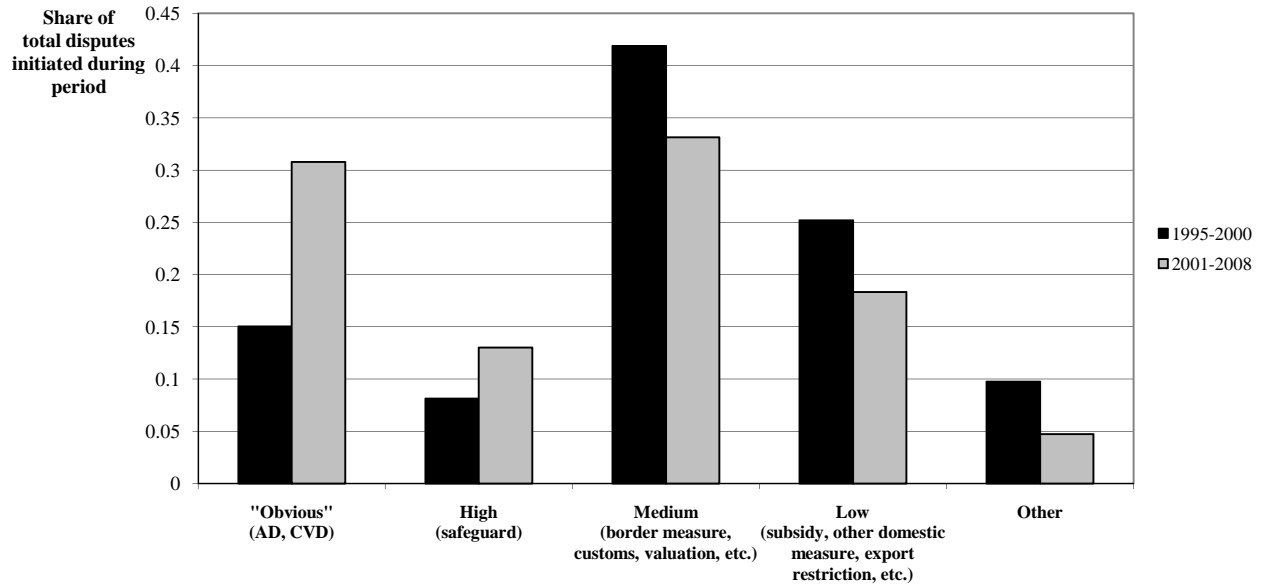
b. Newly imposed trade remedies



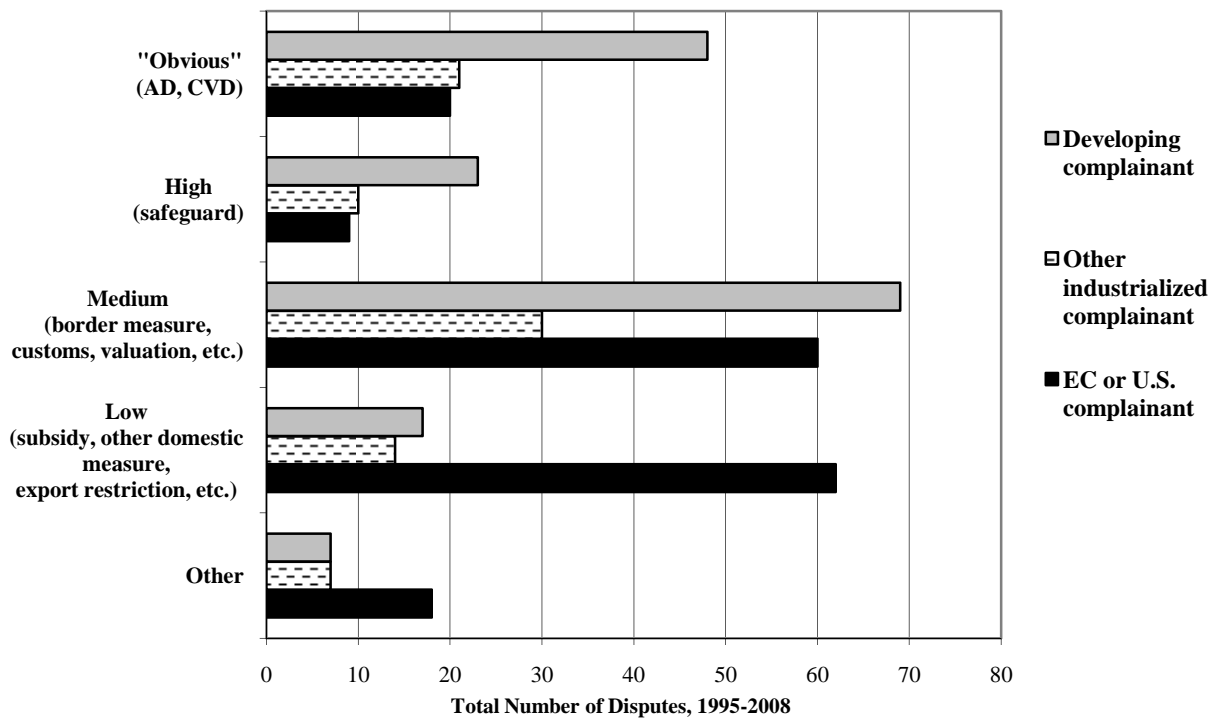
Source: Quarterly data from the Global Antidumping Database (Bown, 2010). To make comparable the data on policy use across different (AD, CVD, SG, CSG) trade remedy laws, AD or CVD investigations (measures) against multiple exporting countries are treated as one product-level investigation (measure). Furthermore, to ensure that they are not redundant, a WTO Member's simultaneous AD and CVD investigations (measures) over the same product are treated as one investigation (measure).

Figure 2: WTO disputes, 1995–2008

a. By observability of alleged cause of lost market access and complainant category and sub-period



b. By observability of alleged cause of lost market access and complainant category



Source: Figure 2a is Bown (2009a, figure 4–7 p. 80). Figure 2b is Bown (2009a, figure 4–6 p. 79).